

Appl. No. 10/383,439  
Atty. Docket No. AA496C  
Amdt. dated 1-21-2004  
Reply to Office Action of 7-21-2003  
Customer No. 27752

REMARKS

Claims 1 - 10 are pending in the present application. No additional claim fees are believed necessary.

Claim 1 has been amended to further define the present invention wherein the carboxylic acid/carboxylate copolymer is defined as an acrylic acid/alkyl acrylate copolymer with a specified formula. Support for this amendment is found in the Specification, page 4, lines 11-20. Further the visible particle of the present invention has been specifically defined as a particle which can be distinctively detected as an individual particle by the naked eye and which is stable in the present composition. Support for this amendment is found in the Specification, page 5, and lines 9-12. Further, the aqueous carrier of Claim 1 has been specifically defined as being selected from water and water solutions of lower alcohols. Support for this amendment can be found in the Specification, page 9, lines 13-14.

With regards to the objection to Claims 5 and 9 under 35 U.S.C. 112, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention, the objection is based on the term "Additional" in Claims 5 and 9 for having no antecedent in Claim 1 and Claims 1, 3-8 respectively. However, Applicants would like to kindly point out that the Specification clearly defines the specific terms "Additional Viscosity Modifier" and "Additional Conditioning Agent" in the specification on pages 18, lines 34 to page 20 line 33 and page 37, lines 26 to page 38, line 2, respectively. Therefore, one of skill of art would clearly understand these terms and their use the claim language. Applicants kindly request reconsideration.

It is believed these changes do not involve any introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

Invention Synopsis

The present invention is directed to a hair conditioning composition for leave-on use on the hair comprising: (1) a acrylic acid/alkyl acrylate copolymer having a specified formula; (2) a visible particle which can be distinctively detected as an individual particle by the naked eye when comprised in the composition and which is stable in the composition; and (3) an aqueous carrier selected from water and water solutions of lower alcohols.

The compositions of the present invention provides favorable aesthetic benefits, and leave the hair and hands with a clean feeling.

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**(A) 35 U.S.C. § 102(e)**

Claims 1, 3, 4 and 5 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hitchen (U.S. 6,106,816).

Hitchen relates to shampoo compositions. Hitchen discloses an aqueous shampoo composition comprising, in addition to water, a surfactant chosen from anionic, nonionic, or amphoteric surfactants, and mixtures thereof, an insoluble, nonvolatile silicone, a suspending polymer chosen from polyacrylic acid, cross-linked polymers of acrylic acid, copolymers of acrylic acid with a hydrophobic monomer, copolymers of carboxylic acid - containing monomers and acrylic esters, cross-linked copolymers of acrylic acid and acrylate esters, and heteropolysaccharide gums, and titanium dioxide coated mica. However, this composition is surfactant based. Therefore, the interactions of the components of Hitchen are surfactant dependent. In Hitchen, the interactions of the surfactant in combination with a suspending polymer, and titanium dioxide coated mica are very distinct and different than those of the present invention, which requires no surfactant. The benefit of the present invention is due to the interaction of an acrylic acid/alkyl acrylate copolymer with a specified formula which, together with a visible particle and specified carrier, provides favorable aesthetic benefits, conditioning benefits such as smoothness and softness, and leaves the hair and hands with clean feeling when the composition. However, Hitchen does not disclose or suggest the benefit of the present invention such as leaving the hair and hands with clean feeling nor the relationship between the benefit and the use of acrylic acid/alkyl acrylate copolymer with a specified formula.

To the contrary, in the surfactant based system of Hitchen, the copolymers of carboxylic acid, such as Carbopol-1342 are described as working as suspending polymers to prevent the titanium dioxide coated mica particles from settling and the silicone from creaming to the top on standing. Hitchen teaches that it is the silicone which condition and softness to the hair, not the copolymers of carboxylic acid. And such may be the case in a surfactant based system. However, in the present invention, the Applicants have surprisingly found that the acrylic acid/alkyl acrylate copolymer provide appropriate viscosity and rheology properties to the composition and emulsify and stabilize certain conditioning agents in the composition; it has further been found that because of the alkyl group contained in the copolymer, the acrylic acid/alkyl acrylate copolymers do not make the composition undesirably sticky. Such would not be the case in the surfactant based composition of Hitchen.

Therefore, Hitchen does not disclose or anticipate the present invention. Applicants' kind request reconsideration.

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**(B) 35 U.S.C. § 103(a)**

Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hitchen (U.S. 6,106,816) in view of Karlen et al (U.S. 6,004,545) and Rath et al (U.S. 5,993,792).

The Examiner has asserted that while Hitchen teaches shampoo compositions comprising copolymers of carboxylic acid such as Carbopol 1342, an aqueous carrier, visible particles, viscosity modifiers, silicon compounds, propylene glycol and cationic conditioning agents. Hitchen does not teach an amphoteric conditioning polymer. The Examiner asserts that it would have been obvious to a person of skill in the art to add Merquat Plus 3300 to the composition of Hitchen to achieve the beneficial effect of an amphoteric conditioner in view of Karlen et al and to further, it would have been obvious to a person of skill in the art to include the other claimed "further comprising" ingredients in the obvious composition of Hitchen in view of Karlen et al to achieve the extra beneficial effect of these additives in view of Rath et al. Applicants respectfully traverse this assertion.

In order to establish a *prima facie* cast of obviousness, the Examiner must show that (1) there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there is a reasonable expectation of success, and (3) all of the limitations of the claims are taught or suggested in the prior art (M.P.E.P. § 2143).

However, the Examiner has not provided the requisite motivation to modify Hitchen with either Karlen et al or Rath et al or both, so as to obtain Applicants' invention. Unlike Applicants invention, none of the references recognize the problem for which the present invention has solved i.e. provides improved texture and no sticky feeling when the hair conditioning composition is spread on hands and/or hair while having a suitable viscosity and delivering improved conditioning benefits such as moisturized feel and softness to the hair. Thus, the references do not recognize the consumer desire for a hair conditioning composition which provides improved texture when the hair conditioning composition is spread on the hands and/or hair, while not compromising basic conditioning benefits, of Applicants' combination of components. Applicants disclose an unexpected improved texture conditioning system wherein Applicants recognize the interactions of the components of such a system.

In particular, Hitchen does not disclose or suggest the benefit of the present invention such as leaving the hair and hands with clean feeling when the composition of the present nor the relationship between the benefit and the use of carboxylic acid/carboxylate copolymer. Thus, Hitchen provides no motivation to select some components included in shampoo-surfactant based

Appl. No. 10/383,439  
Atty. Docket No. AA496C  
Arndt, dated 1-21-2004  
Reply to Office Action of 7-21-2003  
Customer No. 27752

compositions for providing a conditioning composition of the present invention, nor to use the specific combination of components, such as a carboxylic acid/carboxylate copolymer and a visible particle, as taught in the composition. To the contrary, in the surfactant based system of Hitchen, the copolymers of carboxylic acid, such as Carbopol-1342 are described as working as suspending polymers to prevent the titanium dioxide coated mica particles from settling and the silicone from creaming to the top on standing. Hitchen teaches that it is the silicone which condition and softness to the hair, not the copolymers of carboxylic acid. And such may be the case in a surfactant based system. However, in the present invention, the Applicants have surprisingly found that the acrylic acid/alkyl acrylate copolymer provide appropriate viscosity and rheology properties to the composition and emulsify and stabilize certain conditioning agents in the composition; it has further been found that because of the alkyl group contained in the copolymer, the acrylic acid/alkyl acrylate copolymers do not make the composition undesirably sticky. Such would not be the case in the surfactant based composition of Hitchen. According, it would not be obvious to those of skill in the art to provide a hair conditioning composition of the present invention, by the disclosure of Hitchen.

There is no description in any of the references regarding the relationship between the combination of these specific materials of the present invention and the benefit of providing a solution to the problem for which the present invention has solved i.e. provides improved texture when the hair conditioning composition is spread on hands and/or hair while having a suitable viscosity and delivering improved conditioning benefits such as moisturized feel and to the hair. Thus, there is no motivation in Hitchen to combine it with Karlen et al and arrive at the benefit of the present invention. There is clearly no discussion regarding the incorporation of carboxylic acid/carboxylate copolymers in combination with a visible particle to improve texture when the hair conditioning composition is spread on hands with no sticky feeling and/or hair while having a suitable viscosity and delivering improved conditioning benefits such as moisturized feel and softness.

Therefore, Applicants have established that Hitchen neither discloses nor makes obvious the present invention. In view of this, it would not have been obvious to a person of skill in the art to combine Hitchen with the teachings of Karlen et al or Rath et al, regarding addition of amphoteric conditioners and additional conditioning agents and arrive at the present invention. Therefore, combining the composition as taught by Hitchen with the amphoteric conditioner of Karlen et al, or the general and broad teaching in Rath et al disclosing the use of optical brighteners, herbal extracts and UV absorbers, would not led one of skill in the art to the conditioners of the present invention. The benefit of the present invention is due to this carboxylic acid/carboxylate copolymer which, together with other required elements, provides

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favorable aesthetic benefits, conditioning benefits such as smoothness and softness, and leaves the hair and hands with clean feeling when the composition of the present invention.

Therefore, one of ordinary skill in the art would not have lead to modify the compositions of Hitchen by adding or combining the "further comprising" ingredients as disclosed in Karlen et al and Rath et al. Further, one of skill in the art would not be lead by the teaching of Hitchen to combine the teachings of Karlen et al or Rath et al because one would not have a reasonable expectation to succeed in achieving or improving the properties of the composition.

In summary, Hitchen in view of Karlen et al and Rath et al does not establish a *prima facie* case of obviousness. Namely, there is no suggestion or motivation to modify the references, as none of the references, either alone or in combination, recognize the problem which the present invention has solved i.e. provides improved texture when the hair conditioning composition is spread on hands with no sticky feeling in combination with hair having a suitable viscosity and delivering improved conditioning benefits such as moisturized feel and softness. Therefore, Applicants' contend that the claimed invention is unobvious and that the rejection should be withdrawn.

#### Conclusions

In light of the above remarks, it is requested that the Examiner reconsider and withdraw the claim objections and rejection under 102(e) and 103(a). Early and favorable action in the case is respectfully requested.

Applicants have made an earnest effort to place their application in proper form and distinguish their claimed invention from the prior art which was applied in the September 15, 2003 Office Action. WHEREFORE, consideration of this application, amendments filed herein, withdrawal of the rejections under 35 U.S.C § 102(e) and 103(a), and allowance of Claims 1-10 are respectfully requested.

Respectfully submitted,

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